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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/607,790	STUMPERT, MARTIN	
	Examiner	Art Unit	
	Charles Chow	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Office Action for
Applicant's Amendment
(11/10/2003)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek, Jr. et al. (US 6,324,279 B1) in view of Vilain (US 5,461,669).

Regarding **claim 1**, Kalmanek Jr. et al. (Kalmanek) teaches a method of setting up a call (between calling and called party, abstract) in a communication (comm.) network system (col. 3, lines 40-52), with separation of call control and bearer control (the exchanging of messages for setting up the call for the call control, and the exchanging of messages for connecting the call for the bearer control, are processed in a separate, distinct two phases, col. 12, lines 39-48).

Kalmanek teaches the receiving a service request for a call, the request originating internal to the wireless comm. network, or external to the comm. network, the calling parties and called parties are located in different types of networks, col. 3, lines 40-53), which is for either internal or external to the network.

Kalmanek teaches the call being intended for a selected destination (the destination is for called party, col. 12, lines 64-65; the destination is decided based upon the gate allocation for

the call setup, in col. 33, line 55 to col. 34, line 20, and the assigned gateID, col. 34, lines 61-67).

Kalmanek teaches the analyzing the service request and the call origin, because Kalmanek discloses the analyzing in the authenticating of the calling party's identity for authorizing the call service connection (col. 6, lines 53-56).

Kalmanek teaches the selecting at least one media gateway (the gate controller selects the gate based on the specific source, destination, and bandwidth restriction, such that the broadband telephone interface BTI could be able to request resource allocations within the limits imposed by the gate controller (col. 33, lines 60-64).

Kalmanek teaches the allocation of the gate, the establishing of a gateID, and the gatesetup, for selecting one media gateway (in col. 34, lines 11-20, col. 34, lines 21-47) to switch a user plane (customer profile in data base 140, 141, col. 10, lines 16-19), for handling the call dependent on the result of said analysis (the allocating result from Gate controller and Edge router's resource control in the resource allocation, col. 33, lines 56-64).

Kalmanek further teaches the gate setup for call connection (in col. 34, line 46 to col. 35, line 22), the gateopen for connection (in col. 38, lines 21-25), and the call start (in col. 44, lines 50-53).

Kalmanek does not clearly teaches the wireless communication network; the separation of call control and bearer control in the setting up a call in a wireless communication network; the media gateway MGW for handling the call.

Vilain teaches a telecommunication network, mobile radio network (col. 1, lines 29-39, col. 6, line 31) having the separated call control and connection control for call setup and their functions (col. 6, line 67 to col. 8, line 21) and call control layer handles overall call control (col. 2,lines 50-60). Vilain teaches a switching node, as applicant's media gateway MGW, for handling call having call and service control point and bearer control point (Fig. 4, col. 1, line 62 to col. 2, line 7), bearer control functions for setup bearer (col. 5, lines 33-39) such that the call can be routed via different path. Vilain teaches the improve network having switch node for handling broadband dynamic sophisticated multimedia services by separating the call control from the connection control (col. 1, line 40 to col. 2, line 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Kalmanek, and to include Vilain's improved network switching node having separated call control and bearer connection control, such that system could efficiently setup the call connection by utilizing the separate call control and bearer control.

2. Claims 2, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Vilain, as applied to claim 1 above, and further in view of Valentine et al. (US 6,353,607 B1).

Regarding **claim 2**, Kalmanek has taught above a call in different network between calling party and called party (above).

Valentine et al. (as Valentine-'607 below) teaches wireless network (figure in cover page; wireless network in abstract; col. 2, line 5; the two networks, PLMN 50, IP network 100, Fig.

3), for handover using IP address. The MSC sends IP address of the selected media gateway (74 or 76) for handover to reduce further use of circuit connection (abstract; col. 1, lines 4-9; col. 1, line 60 to col. 2, line 3). Valentine-'607 teaches the transmitting the request for IP network address from second MSC to corresponding media gateway, and the transmitting of IP address from the second MSC to first MSC (col. 1, lines 61-67). Valentine-'607 teaches the first MSC transmitting the control message to media gateway to redirect call (col. 2, lines 1-4). Valentine-'607 provides the techniques for redirecting the IP network address to reduce the circuit connections (above), such that the system could be operated efficiently by reducing the circuit connections. Beside, Valentiene-'607 also has shown above, the requesting of the IP network address for redirect the call to a selected media gateway. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Kalmanek, and to include Valentine-607's redirecting the IP network address for the call to reduce the circuit connections, such that the system could be operated efficiently by reducing the circuit connections.

Regarding **claim 12,** Valentine-'607 above has shown the control node MSC for selecting the media gateway MGW using the IP network address for the bearer control.

3. Claims 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Vilain, as applied to claim 1 above, and further in view of Rautiola et al. (US 5,956,331).

In the above, it does not clearly indicate the call is from external to a mobile inside network.

Regarding **claim 3**, Rautiola et al. (Rautiola) teaches the integrated system having radio local area network in hyperlan, 3a-3f. The system includes the network for internet 6, network for MSC, base station and mobile station (figure in cover page, abstract). Rautiola teaches the means to selecting a single gateway among gateways for handling call in col. 15, lines 26-47; plurality of gateways in col. 15, line 38), based on the speed of data transmission at the gateway. Rautiola teaches the establishing of the connection between radio local area network and MSC having protocol conversion (in col. 16, lines 60-67). Rautiola provides a solution for global call connection of the integrated networks based on the speed of data transmission (above), such that the selecting of the gateway connection could be reliable by considering of the speed capacity of the gateway (above). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Rautiola's global call connection of the integrated networks based on the speed of data transmission (above), such that the selecting of the gateway connection could be reliable by considering of the speed capacity of the gateway.

Regarding **claim 4**, referring to Rautiola for the external to external call connection in between by selecting third, fourth gateway (col. 16, line 29; col. 16, lines 38) from Rautiola.

Regarding **claim 5**, referring to Rautiola's claim 1 above for the media gateway selected from among plurality of gateway, based on the speed of the data transmission.

Regarding **claim 6**, referring to Kalmanek above, the selection of the gateway is based on the traffic load at specific destination (col. 48, lines 36-42), the bandwidth consideration condition (above), for applicant's selected destination for the call.

Regarding **claim 7**, referring to claim 3 above, for the internal network call to external network in the integrated networks (Rautiola) having internet, mobile network with MSC, and radio local area network for selecting a single media gateway from plurality of gatways.

Regarding **claim 8**, referring to Rautiola for the selecting a gateway from among plurality of gateways, according to the speed of data transmission capability of the gateway.

Regarding **claim 9**, referring to Kalmanek for the selecting of the gateway based on the traffic loading condition at the specific destination (col. 48, lines 36-42) and bandwidth consideration.

Regarding **claim 10**, Kalmanek discloses the holding of a call for the three way calling, (in col. 57, lines 19-26). Kalmanek has shown above the selecting of the gateway is based on the traffic loading conditions, if held call can not be used to select an MGW based on the traffic conditions.

4. Claims 11, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Jouppila et al. (US 6,208,633 B1), and further in view of Rautiola et al.

Regarding **claim 11**, Kalmanek has taught above the separation of call control and bearer control, the mobile network, the MSC 12 (figure in cover page), for determining the media gateway for routing user profile plane, the requesting resources from IWF for transmitting end to end connection information for call connection routing (col. 4, lines 8-13, col. 4, lines 64-65). Kalmanek does not clearly teaches the wireless communication network; the

separation of call control and bearer control in the setting up a call in a wireless communication network; the media gateway MGW for handling the call.

Regarding the routing a user plane of a call and separated call control and bearer control for the setting up a call in a wireless communication network, the media gateway MGW for handling the call, Jouppila teaches the improved technique by separating of the call control and the connection control to allow the separate connection control mechanism to handle the physical and virtual channel connection in a mobile communication system (abstract, col. 1, lines 7-15; figure in cover page; col. 6, lines 12-19). Jouppila teaches the call control plane for separation of traditional call control into service-specific call control and radio-specific call control (as shown in Fig. 1; summary of invention; col. 3, line 28 to col. 4, line 7). Jouppila teaches the user plane for controlling the radio bearer connection, fixed network bearer connection (as shown in Fig. 2; col. 4, lines 8-65). Jouppila teaches the at least two separate and distinct control entities, the service call control entity SCC for standard high level call control function, and the wireless network specific call control WCC for radio access control, service negotiation (col. 3, lines 28-45). Regarding the media gateway MGW for handling the call, Jouppila teaches the service node 16 for handling the call (as shown in Fig. 1/Fig.2; col. 7, line 33 to col8, line 23). Jouppila teaches the improved technique for handling of the disparate services by utilizing a separate connection control mechanism for separating the traditional call control into service-specific call control and radio-specific call control (col. 2, lines 32-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Kalmanek, and to include Jouppila's improved call

connection control mechanism, such that system could efficiently setup the call connection by utilizing the separate call control, service-specific call control and the radio-specific call control.

Kalmanek and Joppila do not clearly teach the determining of a media gateway for call routing. Rautiola teaches the selecting of the further gateways, the third, fourth gateway for connecting the call, the integrated system having radio local area network in hyperlan, 3a-3f. The system includes the network for internet 6, network for MSC, base station and mobile station (figure in cover page, abstract). Rautiola teaches the means to selecting a single gateway among gateways for handling call in col. 15, lines 26-47; plurality of gateways in col. 15, line 38), based on the speed of data transmission at the gateway. Rautiola teaches the establishing of the connection between radio local area network and MSC having protocol conversion (in col. 16, lines 60-67). Rautiola provides a solution for global call connection of the integrated networks based on the speed of data transmission (above), such that the selecting of the gateway connection could be reliable by considering of the speed capacity of the gateway (above). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Rautiola's global call connection of the integrated networks based on the speed of data transmission (above), such that the selecting of the gateway connection could be reliable by considering of the speed capacity of the gateway.

Regarding **claim 16**, Joupilla taught above in claim 1 the IWF, as the media gateway, for the virtual connection logic point.

4. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Joppila, Rautiola, as applied to claim 11 above, and further in view of Joensuu et al. (US 5,878,347).

In the above, it does not include the further control node is a gateway MSC.

Regarding **claim 13**, Joensuu et al. (Joensuu) teaches the GMSC 80 (figure in cover page, abstract) for mobile station 30. Joensuu consider the new HLR retrieves the routing information for the gateway to utilize for routing the call (abstract), for the claimed control node gateway MSC for controlling the call. Joensuu considers the centralized database having routing information and the GMSC for controlling the call (col. 2, lines 1-24), such that the system could be operated efficiently by retrieving the network address from the centralized data base independent of the relocation of the mobile station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Joensuu's centralized database having routing information, and the GMSC for controlling the call, such that the system could be operated efficiently by efficiently retrieving the network address from the centralized data base. Rautiola has shown above the further controlling of the node selection for the third, fourth node.

Regarding **claim 14**, Joensuu has taught in claim 13 above for the GMSC, and MSC 40.

Regarding **claim 15**, referring to Joensuu for the transit switching center performed by the gateway mobile switching center GMSC (in col. 8, lines 30-38) for routing the incoming call

for MSC based on the retrieved network address for that MSC. The GMSC performs the transit switch function for MSCs.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Joppila, Rautiola, as applied to claim 16 above, and further in view of Valentine et al. (US 6,219,546).

In the above, it does not include the transferring of the identification of the logical point. Regarding **claim 17**, Valentine et al. (Valentine-'546 below) teaches the reallocating satellite gateway having GMSC 23, gateway s GW-1, GW-2 (abstract, figure in cover page). Valentine-'546 teaches (his claims 6, 9) the rerouting call to backup gateway, and the re-configuration of the backup gateway when primary gateway fails. The routing number is returning to the GMSC. In col. 8, lines 25-30, the logical point gateway identifier is found for the backup gateway. Valentine-'546 teaches the technique using a backup gateway, when primary gateway fails (above), such that the system could reroute the call using the backup gateway without dropping the call (col. 2, lines 15-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Valentine-'546's backing up gateway for the primary gateway, such that the system could reroute the call using the backup gateway without dropping the call.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Joppila, and further in view of Valentine-'546.

Regarding **claim 18**, Kalmanek has taught above in claim 1 for the plurality of control nodes MSCs 12, 14. Jouppila has taught the requesting resources among gateways for handling user profile plane, the virtual connection of logical point. Jouppila teaches the improved technique by separating of the call control and the connection control to allow the separate connection control mechanism to handle the physical and virtual channel connection in a mobile communication system (abstract, col. 1, lines 7-15; figure in cover page; col. 6, lines 12-19). Jouppila teaches the call control plane for separation of traditional call control into service-specific call control and radio-specific call control (as shown in Fig. 1; summary of invention; col. 3, line 28 to col. 4, line 7).

Regarding the routing a user plane of a call and separated call control and bearer control for the setting up a call in a wireless communication network, the media gateway MGW for handling the call, Jouppila teaches the improved technique by separating of the call control and the connection control to allow the separate connection control mechanism to handle the physical and virtual channel connection in a mobile communication system (abstract, col. 1, lines 7-15; figure in cover page; col. 6, lines 12-19). Jouppila teaches the call control plane for separation of traditional call control into service-specific call control and radio-specific call control (as shown in Fig. 1; summary of invention; col. 3, line 28 to col. 4, line 7). Jouppila teaches the user plane for controlling the radio bearer connection, fixed network bearer connection (as shown in Fig. 2; col. 4, lines 8-65). Jouppila teaches the at least two

separate and distinct control entities, the service call control entity SCC for standard high level call control function, and the wireless network specific call control WCC for radio access control, service negotiation (col. 3, lines 28-45). Regarding the media gateway MGW for handling the call, Jouppila teaches the service node 16 for handling the call (as shown in Fig. 1/Fig.2; col. 7, line 33 to col8, line 23). Jouppila teaches the improved technique for handling of the disparate services by utilizing a separate connection control mechanism for separating the traditional call control into service-specific call control and radio-specific call control (col. 2, lines 32-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Kalmanek, and to include Jouppila's improved call connection control mechanism, such that system could efficiently setup the call connection by utilizing the separate call control, service-specific call control and the radio-specific call control.

Valentine-'546 teaches the reallocating satellite gateway having GMSC 23, gateway s GW-1, GW-2 (abstract, figure in cover page, his claims 6, 9), the rerouting call to backup gateway, and the re-configuration of the backup gateway when primary gateway fails. The routing number is returning to the GMSC. In col. 8, lines 25-30, the logical point gateway identifier is found for the backup gateway. Valentine-'546 teaches the technique using a backup gateway, when primary gateway fails (above), such that the system could reroute the call using the backup gateway without dropping the call (col. 2, lines 15-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Valentine-'546's backing up gateway for

the primary gateway, such that the system could reroute the call using the backup gateway without dropping the call.

7. Claims 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Jouppilla, Valentine-'546, as applied to claim 18 above, and further in view of Kung et al. (US 6,373,817).

In the above, it does not clearly indicate the plural MGW resources. transcoder, conference call device, modem, tone generator, framing device, announcement device.

Regarding **claim 19**, Kung et al. (Kung) teaches the call routing system no matter where the called party is located, in a multi-network accessing, using gateway 120 (abstract, figure in cover, Fig. 1-4). Kung teaches the gateway resource, announcement service AS server 220 is utilizing the protocol from H.gcp (col. 9, line 66 to col. 10, line 12). Kung teaches the conference call service is utilizing H.gcp protocol (col. 13, lines 36-43). Kung teaches the gateway resources, modem, translator, device control protocol H.gcp in col. 20, lines 41-49). Kung provides routing calls in multiple network no matter where the called party is located, having resources shown above, such that call could be controlled with more routing options, and call forwarding option remotely via internet or telecommunication network (col. 1, lines 53-57) for efficient call routing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Kung's routing calls in multiple network no matter where the called party is located, having supported resources such that the call routing could be efficient.

Regarding **claim 20**, Kung has taught above (col. 20, lines 41-49), the broadband residential gateway 300 utilizes the H.gcp protocol.

Regarding **claim 21**, referring to Kung above for the system utilizes device control protocol is H.gcp.

Regarding **claim 22**, Valentine-'546 has taught in claim 17, the control nodes for requesting resources from MGW in response to the call service request.

Regarding **claim 23**, Valentine-'546 has taught above in claim 17, the identifying one logical point for MGW, control node, in response to call service request.

Regarding **claim 24**, Valentine-'546 has taught above in claim 17 above for the H.gcp, the identified logical point for resources 80, 82 of the MGW.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Jouppilla, Valentine-'546, as applied to claim 18 above, and further in view of Graf (US 6,490,284 B1).

In the above, it does not clearly teach the N-ISUP.

Regarding **claim 25**, Graf teaches the call control (abstract, figure in cover page) using narrowband integrated services digital network user part N-Isup (col. 7, lines 1-4, Fig. 1-3), for the separating the call control signaling information from the bearer control signaling information (abstract), for transmitting identification code (col. 6, lines 38-67). Graf teaches the separating the call control from bearer control, and using Isup, such that the resource could be independently supported (col. 2, lines 21-29). Therefore, it would have been

obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Graf's separating the call control from bearer control, and using Isup, such that the resource could be independently supported for efficient call routing.

9. Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Jouppilla, Valentine-'546, as applied to claim 18 above, and further in view of Yang et al. (US 6,198,936 B1).

In the above, it does not clearly teach the user plane transferred compressed within and between MGW.

Regarding **claim 26**, Yang et al. (Yang) teaches the above features in Yang's claims 1-2, for the user plane in Fig. 1 and Fig. 3. Yang teaches the abbreviated information, plane point 41, for the user plane in Fig. 4). Yang teaches the transmitting medium access control MAC having the user plane (col. 6, lines 30-31), and the receiving user plane (in col. 6, lines 38-42). Yang teaches the transmitting and receiving the user control plane information, such that the system could improve the efficiency, and avoid the waste of radio resource caused by out-of-band signal by using assigned associated control channel (col. 2, lines 6-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Yang's transmitting and receiving the control plane information, such that the system could improve

the efficiency, and avoid the waste of radio resource caused by using assigned associated control channel.

10. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Jouppila, and further in view of Valentine-'607.

Regarding **claim 27**, Kalmanek has taught above in claim 1, the control node having the application logic for call control to allow pooling of the IWF/MGW resources under control of the application logic. Kalmanek's computer-readable medium having stored instructions in his claims 1, 8, 9, 14, 22-28, 36-42, 5-, 53, 57-60). Jouppila teaches the routing of user plane, parameters transmitting (Fig. 2, col. 2, lines 60-61, col.4, line 51 to col. 5, line 40). Jouppila teaches the improved technique by separating of the call control and the connection control to allow the separate connection control mechanism to handle the physical and virtual channel connection in a mobile communication system (abstract, col. 1, lines 7-15; figure in cover page; col. 6, lines 12-19). Jouppila teaches the call control plane for separation of traditional call control into service-specific call control and radio-specific call control (as shown in Fig. 1; summary of invention; col. 3, line 28 to col. 4, line 7). Jouppila teaches the user plane for controlling the radio bearer connection, fixed network bearer connection (as shown in Fig. 2; col. 4, lines 8-65). Jouppila teaches the at least two separate and distinct control entities, the service call control entity SCC for standard high level call control function, and the wireless network specific call control WCC for radio access control, service negotiation (col. 3, lines 28-45). Regarding the media gateway MGW for handling the call, Jouppila further teaches

the service node 16 for handling the call (as shown in Fig. 1/Fig.2; col. 7, line 33 to col. 8, line 23). Jouppila teaches the improved technique for handling of the disparate services by utilizing a separate connection control mechanism for separating the traditional call control into service-specific call control and radio-specific call control (col. 2, lines 32-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Kalmanek, and to include Jouppila's improved call connection control mechanism, such that system could efficiently setup the call connection by utilizing the separate call control, service-specific call control and the radio-specific call control.

Valentine-607 taught above the wireless network (figure in cover page; wireless network in abstract; col. 2, line 5; the two networks, PLMN 50, IP network 100, Fig. 3), for handover using IP address. The MSC sends IP address of the selected media gateway (74 or 76) for handover to reduce further use of circuit connection (abstract; col. 1, lines 4-9; col. 1, line 60 to col. 2, line 3). Valentine-'607 teaches the transmitting the request for IP network address from second MSC to corresponding media gateway, and the transmitting of IP address from the second MSC to first MSC (col. 1, lines 61-67). Valentine-'607 teaches the first MSC transmitting the control message to media gateway to redirect call (col. 2, lines 1-4). Valentine-'607 provides the techniques for redirecting the IP network address to reduce the circuit connections (above), such that the system could be operated efficiently by reducing the circuit connections. Beside, Valentiene-'607 also has shown above, the requesting of the IP network address for redirect the call to a selected media gateway. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Kalmanek,

and to include Valentine-607's redirecting the IP network address for the call to reduce the circuit connections, such that the system could be operated efficiently by reducing the circuit connections.

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanek in view of Jouppila, Valentine-'607, as applied to claim 27 above, and further in view of Edson (US 6,526,581 B1).

In the above, it does not clearly teach the interface between MGW and control node. Regarding **claim 28**, Edson teaches the interface, because Edson teaches the gateway 13 (figure in cover page) interface to plurality of external networks for the in-home networks, using software application program interface API (abstract, col. 3, lines 11-43). Edson provides a simple efficient common interface to external networks using gateway for in-home network, such that the communication could be efficient (col. 2, line 64 to col. 3, line 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention, essentially if not obvious, to modify Kalmanek above, and to include Edson's simple efficient common interface to external networks using gateway for in-home network, such that the communication link could be efficient by using the simple common interface.

Response to Arguments

12. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's argument based on the no teachings for the separate call control and bearer control, the call connection and the setup call, the call routing via different path, the grounds of rejection has been changed to include Vilain (US 5,461,669).

Vilain teaches a telecommunication network, mobile radio network (col. 1, lines 29-39, col. 6, line 31) having the separated call control and connection control for call setup and their functions (col. 6, line 67 to col. 8, line 21) and call control layer handles overall call control (col. 2,lines 50-60). Vilain teaches a switching node, call and service control point and bearer control point (Fig. 4, col. 1, line 62 to col. 2, line 7), bearer control functions for setup bearer (col. 5, lines 33-39) such that the call can be routed via different path. Vilain teaches the improve network having switch node for handling broadband dynamic sophisticated multimedia services by separating the call control from the connection control (col. 1, line 40 to col. 2, line 7).

Jouppila teaches the routing of user plane, parameters transmitting (Fig. 2, col. 2, lines 60-61, col.4, line 51 to col. 5, line 40). Jouppila teaches the improved technique by separating of the call control and the connection control to allow a separate connection control mechanism to handle the physical and virtual channel connection in a mobile communication system (abstract). Jouppila teaches the separated call control and connection control for ATM system for handling variety bearer connection characteristic of the broadband ISDN (col. 2, lines 25-35). Jouppila teaches the separate radio call control means and service call control means for call connection (col. 6, lines 45-57), the separate handling of the resources used by radio call-control and service call-control (col. 6, lines 58-67), for the separate connection mechanism to handle the physical and virtual channel connection. Jouppila teaches the fixed

network connection (Fig. 2) is for fixed network which is not for the connection is a fixed connection, since the connection is setup according to service control protocol (col. 4, lines 25-28).

In view of cited references, claims 1-28 are remaining in rejected manner.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Charles Chow C.C.

January 27, 2004.

EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600